I-5 HOV AND TRUCK LANES PROJECT

07- LA-5 P.M. R45.4/R59.0

EA No. 07-2332E0

PM2.5/PM10 HOT SPOT ANALYSIS RESPONSE TO COMMENTS

FHWA Comments

Comment #1: There appears to be an error in Table B where the table carries over from page 6 to 7. On page 7, it identifies data for "Santa Clarita Air Quality Monitoring Station." I believe the data is from the Burbank Air Quality Monitoring Station. Also, on page 6 in the same table, it states "Burbank Quality Monitoring Station" and is missing the "Air."

Response: The table has been corrected as requested.

Comment #2: I would also like to see more information regarding why there is no change in daily traffic volumes between the 2015 and 2030 build and no build alternatives. One of the stated purposes of the proposed project is to reduce existing and forecast traffic congestion on the project segment of I-5 *to accommodate planned growth within the study area*. (Refer to page 2, third bullet.) The Study assumes no change in daily traffic volumes under the future build versus no build alternatives because "there are few alternative routes to I-5 within the project vicinity" and "since there are few alternative routes, traffic has to utilize the I-5 freeway regardless of how bad congestion is." (Refer to page 7). It appears that *planned growth* has been accounted for in Tables C, E, and F, but it would be helpful to provide a brief explanation of how you reached these numbers.

Response: The planned growth that is referenced in the study is presumed to occur with or without the freeway project. The traffic forecasts are based on full buildout of the land uses allowed by the City and County's General Plans, and therefore represent the maximum traffic scenario. Similarly, the origin and destination of trips is also presumed to be fixed irrespective of the status of the freeway project. As such, the demand for travel into and out of the Santa Clarita Valley remains constant for either the build or no-build scenario.

Within the Santa Clarita Valley itself, the only other freeway is Route 14, which experiences a greater amount of congestion than does I-5. Only one arterial roadway, The Old Road, parallels I-5 and that too is forecast as operating at capacity either with or without the freeway project. For those reasons, neither of these routes represent a viable alternative to the I-5, and the trips forecast to enter or leave the Santa Clarita Valley have no practical alternative other than to use the I-5 freeway through the Newhall Pass. This information has been added to the revised hot spot analysis.

EPA Comments

Comment #1: Analysis Method. The EPA/FHWA qualitative hot-spot guidance indicates that two methods can be used for completing qualitative hot-spot analysis. The analysis can be done by use of comparison of the project to another location with similar characteristics or air quality studies for the *proposed* project location. The analysis under review seems to use a combination of both methods in this analysis, by comparing the project to another project with similar traffic and by looking at emission estimates for the project under examination. The analysis method, page 5, doesn't currently indicate that emission estimates for the project are examined, in addition to analysis of ambient trends and it isn't clear if the comparison to another location is only to determine existing background concentrations or future concentration for the new project. The methodology should more clearly explain with method is being used and how the method is being used to predict worst-case future ambient concentrations.

Response: The analysis has been revised to clarify that the existing conditions, and the ability to meet the conformity requirements, have been evaluated using the first method outlined in the EPA/FHWA guidance. An emissions analysis was conducted to determine the impact that the proposed project would have on the region's ability to meet the ambient air quality standards.

Comment #2: Data Considered. The analysis should include a map showing the location of the monitoring stations in relation to the I-5 and the project under analysis and should list the total approximate volumes of traffic at the roadways near the monitoring stations, not just the truck volumes.

The text indicates that daily truck volumes near the monitors (18,250-18,500) are comparable to volumes along the project area. Is this comparison made, not to examine potential future impacts of the project, but existing background concentrations? If that is the case, the document should more clearly state that. If the comparison is made to predict future concentrations, as envisioned in the hot spot guidance, then the total and truck volumes in the location should be similar to that projected for the future worst case year. While the truck volumes near the monitors are comparable to the existing project data for I-5, the volumes are considerable less than the truck volumes in 2015 and 2030. The document should state that while the comparison is relevant for determining existing background concentration, additional analyses (emissions comparisons and trends analysis of background data) are need to help support the conclusion that the cumulative impact of the project will not result in new violations. The result of this comparison should also be included in the conclusions for the project on page 10 of the document.

Response: A map showing the project location relative to the monitoring stations has been added to the analysis. The total daily traffic volumes along I-5 have been added to the truck traffic volumes in the revised analysis.

Please refer to response to EPA comment #1. The existing traffic volumes and monitoring data were used to demonstrate that the AAQS could be met under the no build conditions. The emissions analysis was conducted to determine what impact the proposed project would have on the future $PM_{2.5}$ and PM_{10} concentrations.

Comment #3: Trends in Baseline PM2.5 Concentrations. Since this section only examines ambient concentration data, the term "Emission" should be removed from this title since it might confuse readers who do not understand the differences between ambient concentrations and emission projections**.**

It's not clear how the 2015 concentrations for the Burbank station were determined to be below the ambient standard when the concentration trends appear to be going upward for both the Burbank and Santa Clarita stations.

Response: The term "Emission" has been removed from the $PM_{2.5}$ and PM_{10} section headings.

The PM_{10} concentrations currently attain the federal 24-hour standard at the Burbank and Santa Clarita stations. As stated in the analysis, the future attainment was based on the 2015 projection included in the 2007 AQMP.

Comment #4: Transportation and Traffic Conditions/Analysis Years. The EPA/FHWA qualitative hot-spot guidance indicates, in Chapter 3, Analytical Requirements, that areas should examine the years within the transportation plan, as appropriate, (1) during which peak emissions from the project are expected and (2) a new violation or worsening of an existing violation would most likely occur due to the cumulative impacts of the project and background concentrations. On page7 of the document, the analysis indicates that traffic data are projected to 2015 and 2030 to demonstrate conditions following the first open year of the project and within the full timeframe of the current transportation plan. The text should include additional language explaining how these years satisfy the years when peak emissions and expected and when a new violation would most likely occur. Also, the analysis of the ambient trends data should indicate how the trends in data relate to the impact of the project in the year when peak emissions are expected.

Response: Please refer to response to EPA comment #1. As stated in the comment, the 2015 and 2030 years were established in the traffic analysis as the project opening year and build-out year, respectively. The purpose of the emissions analysis was not to model the peak emission years but to demonstrate that the project would have no impact on the regional $PM_{2.5}$ or PM_{10} concentrations. However, EMFAC2007 indicates that the emission factors generally decrease in the future years due to the planned control measures. Therefore, 2015 represents the year when peak emissions are expected due to the high emission rates.

Comment #5: Traffic Changes Due to the Proposed Project. It would be useful to have more explanation why there is no increase in traffic between the no-build and build alternatives. If congestion is improved, one might expect that some additional trips may occur on the route that would have been deferred to avoid the congestion. Also, additional growth may occur in the area since the area would become more appealing without the congestion.

Response: Please refer to response to FHWA comment #2.

Comment #6: Emission Tables. Two tables of emissions for the project under different scenarios and years are shown on page 13. However, there is no text in the document, explaining how the emissions were estimated, what model was used, and what the differences are in the traffic between the Build vs No Build alternatives or that emissions go down for the project. Since is important, especially since the previous tables for the project show no difference in traffic for the alternatives.

Response: The methodology used to calculate the $PM_{2.5}$ and PM_{10} emissions has been added to the analysis.